

CLAIMS

We claim:

1. In an amusement device, an identification transmission system comprising:

5 a transmitting antenna;

a transmitter circuit configured to broadcast a predetermined tone on a predetermined carrier frequency through the antenna; and

10 a piezo-electric power source electrically coupled to the transmitter circuit and configured to at least briefly provide power to the transmitter circuit, the piezo-electro power source including:

a piezo-electric element;

a striker configured to move so as to at least briefly strike the piezo-electric element;

15 a storage capacitor configured to receive and store electrical charge from the piezo-electric element; and

a voltage controlled switch configured to allow the storage capacitor to discharge through the transmitter circuit thereby providing power thereto after a predetermined amount of charge has been stored.

20 2. The identification transmission system according to claim 1, wherein the striker is configured to repeatedly strike the piezo-electric element.

3. The identification transmission system according to claim 1, wherein the predetermined tone is between about 600 Hz and about 2200 Hz.

4. The identification transmission system according to claim 1, wherein the predetermined carrier frequency is between about 38 KHz and about 900 MHz.

5. The identification transmission system according to claim 1, wherein the device has a cyclically operating mechanism operably coupled with the striker to move the striker to repeatedly strike the piezo-electric element during use of the device.

6. The identification transmission system of claim 1, wherein the
5 transmitter includes a digital encoding circuit configured to digitize the predetermined tone.

7. The identification transmission system of claim 1, wherein the device is a toy vehicle having at least one wheel, wherein the striker is coupled to the wheel and is actuated by rotation of the wheel.

8. The identification transmission system of claim 1, wherein the device
10 includes a moveable part accessible by a user, wherein the striker is coupled to the moveable part and is actuated by movement of the moveable part by a user.